Pivati matronam sexagenariam simili modo liberavit arthritide, qua sex menses vexata suerat. In magno tumore suerunt digiti continuo trementes, et brachium unum convulsionibus agitatum est. Sed post duo minuta prima, quam vires electricitatis experta erat, tremor digitorum desiit. Postero die tumor ita decrevit, ut chirothecas induere, et officio manuum sungi potuerit matrona.

Hæc adeo clara sunt, ut nullus videatur locus dubitandi de auxilio, quod medicinam sibi ex electricitate comparare posse censeo. Qua in sententia animum meum confirmat suffragium, quo judicii plenus et in re medica versatissimus Morgagni, in academia Patavina anatomiæ professor, explicatum sibi a Pivati negotium egregie comprobavit, eumque, subministratis consiliis, impense cohortatus est ad rem medicinæ accommodatam generique humano sructuosissimam novis subinde laboribus persiciendam.

XIX. A Letter from Mr. Henry Baker F. R. S, to the President, concerning several Medical Experiments of Electricity.

SIR

Read March 13. HOUGH perhaps as many curious 1748. and well-contrived Experiments have been made in England as in all the other Parts of Europe, to discover the general Laws and Properties of Electricity; we have not hitherto attended to the Effects that may be thereby produced in the Bodies of living Animals, any further than

supposition that Diseases may be killed thereby; a Supposition that Diseases may be cured by means of this Power, having met with so little Countenance amongst us, that very sew Trials have been made, to ascertain what, in distemper'd Cases, it can or cannot perform. Foreigners, on the contrary, seem fond of believing, that the subtil electric Fluid (be it Fire, Æther, or whatever else) which can pervade all Bodies, and (being accumulated) even kill an Animal, in certain Circumstances, and by certain Methods of Application, may, possibly, in other Circumstances, and applied in different Degrees, and by different Methods, so operate on the Fluids or Solids, and perhaps on both, that very beneficial and salutary Effects * may result therefrom.

With this View the Abbè Nollet made several Experiments on living Birds, Kittens, and human Bodies; and if we may give Credit to the Accounts thereof communicated to us, he found, in every Trial, that Perspiration was so considerably promoted thereby, as to cause a very sensible Difference between the Weight of such Animals as had been electrified, and others of the same Kind that were treated exactly alike in every respect besides: Whence he naturally concludes, that, in Cases where it is necessary to quicken the Circulation of the Finids, and throw off a greater Quantity of the perspirable Matter, Electricity must be greatly useful.

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^{*} As is suggested by Dr. Mortimer in these Transact. n. 476, 2. 479.

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The Philosophers in Italy and Germany have applied their Industry to discover by Experiment, how far Electricity may, simply and in itself, be of Service in feveral Diseases, and likewise how far it may conduce towards conveying the more fubtile and active Effluvia of useful Medicines, either into the whole Body, or into some distempered Part.—Mr. Watson read, last Thursday, before the Royal Society, an Abstract of the preceding Paper, sent to Dr. Mortimer from Leiplic, by Professor Winckler, of several Experiments to this Purpose, made at Venice by M. Pivati, and repeated afterwards by himself at Leipsic with the same Success. He gives Instances of saturating, by Electrification, with the Effluvia of Balfam of Peru, and of Sulphur, so as to produce very remarkable Effects; and of taking a Fit of the Gout away intirely, by conveying into the Part afflicted the fanative Effluvia of warm and discutient Drugs.

My ingenious Friend Dr. Joseph Bruni, one of the principal Physicians at Turin, and Fellow of our Royal Society, has likewise sent to me an Account, lately received by him, of Experiments made at Rome, and at Bologna; which I now, Sir, lay before you, in order to shew what Attempts to the same Purpose have been made in different Countries, and by different People. — The Doctor informs me, that at Turin they have repeated, with great Success, the electrical Experiments made in England, whereof I had sent him printed Accounts; that People all over Italy are busily at Work making electrical Experiments; and that, at Bologna, the electrical Power has been applied to the Cure

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of Diseases. He then gives me a Transcript of an Account sent him from thence in the French Language, which, translated, is as follows.

A Man, who had been for a whole Twelvemonth deaf of one Ear, with a continual Noise in it like the Running of Water, attended with most violent Pain whenever he lay with that Ear uppermost, coming to Dr. Verati for Advice, the Doctor electristed him, bringing out Abundance of stery Sparks around the distemper'd Ear; which, in about five Minutes that the Electristication was continued, became as red as if a blistering Plaister had been applied to it. But the Redness disappeared in a few Minutes after, the Patient passed the Night with less Pain and Noise, and was perfectly cured of his Disorder.

A Footman belonging to the said Doctor, being taken suddenly ill of a violent Pain in the Head, which continued many Hours, he was thereupon electrified, the Doctor causing the Sparks of Fire to issue from the Temple wherein the Pain was felt. The Part appeared red, the Pain abated; in three Hours it was intirely gone, and has never returned since.

A Woman that nursed one of the Doctor's Children, having had a most grievous Disorder in her Eyes for some Months, with a continual Running of Water from one of them, and a constant Pain over the Eye-lid, came to the Doctor for Advice; who immediately electrified her, bringing out the fiery

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fiery Sparks about the Eye and Eye-lid, whereby the Eye appeared very much blood fhot; but that went off in 7 or 8 Minutes. The Woman felt less Pain the following Night, and opened her Eye in the Morning more casily, and without being obliged to wipe it, as she did before: The watry Humour and Pain were much diminished; and the Doctor hoped, that, by repeating the Operation twice more, he should be able to cure her quite.

Dr. Bruni gives me next his Information from Rome; which is, that a Gentleman there cover'd the internal Surface of a Cylinder of Glass (which some use instead of a Globe) with a purgative Medicine; and that a Man, electrified therewith, found on the Spot the same Effects as if he had swallowed the Medicine. He then recommends to us in England to try how far the electric Power may be of Service in Distempers.

These Cases, Sir, and particularly the last, as it may to some appear extravagant and whimsical, I should have been cautious of bringing before the Royal Society, had you not judged it proper they should be added to those similar Accounts from other Places which were read to us last Meeting. I think neither myself nor Dr. Bruni answerable for the Truth of these Fasts, as we relate no more than what we have received. In Truth, all the Phanomena in Electricity are so wonderful, that it is searcely prudent to deny the Possibility of any Accounts concerning it, till we have made Experiments carefully ourselves. We are very sure it is possible to render

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render a living Body replete with electrical Effluvia, or to transmit and send such Effluvia through a living Body, in a Stream, as long as we think proper: We are not sure that it is impossible for these Effluvia to convey with them into that living Body the most subtile and active Effluvia of other Substances; and if they can do so, the Effects suggested are not wholly improbable; for feveral Experiments have proved, that a very minute Quantity of Medicine, transfused directly into the Blood, and circulating Fluids, will have the same Effect as a large Dose thereof taken into the Stomach. even this last Case, romantic as it may seem, should not be absolutely condemned without a fair Tryal; fince we all, I believe, remember the Time, when those Phanomena in Electricity, which are now the most common and familiar to us, would have been thought deserving as little Credit, as the Case under Consideration may seem to do, had Accounts of them been sentus from Rome, Venice, or Bologna, and had wenever experienced them ourselves.

I am proud to seize every Occasion to assure you with what great Respect I am,

SIR

Strand, March 28, 1748.

Your most faithful and obedient humble Servant.

Henry Baker.